



AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

AS157

AS158

AS159

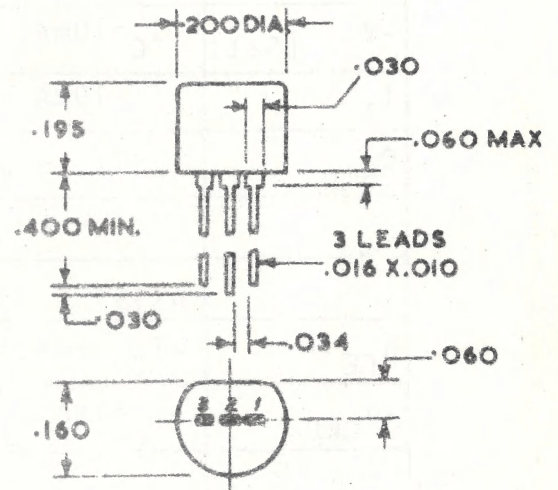
The AS157, AS158 and AS159 are P-N-P silicon planar epitaxial transistors in epoxy packages for use in A.F. and switching circuits.

The AS157 is a high voltage type. Both it and the AS158 are suitable for many applications in audio driver and pre-amplifier circuits and in signal processing circuits of television receivers.

The AS159 is a low-noise type intended for low noise input stages of audio frequency equipment.

All three are also intended as P-N-P complements for the AS147, AS148 and AS149.

#### DIMENSIONAL OUTLINE

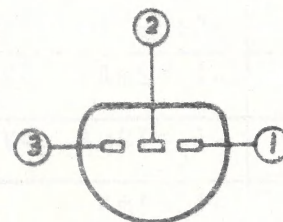


Dimensions in inches

#### ABSOLUTE MAXIMUM RATINGS

	AS157	AS158	AS159
Collector-emitter Voltage $-V_{CEO}$	= 45	25	20 V
Collector-base Voltage $-V_{CBO}$	= 50	30	25 V
Emitter-base Voltage $-V_{EBO}$	= 5	5	5 V
Emitter Current	= 100	100	100mA

#### TERMINAL DIAGRAM



Lead 1—Emitter  
Lead 2—Base  
Lead 3—Collector

#### THERMAL RATINGS

Dissipation in an ambient temperature up to 25°C ---- 300mW max.  
Derate linearly to zero at 135°C.

During soldering lead temperature must not exceed 255°C for 10 Secs. max. within 1/16" of can.

Storage temperature -25°C to 135°C.

SEPT. 1970.

CHARACTERISTICS AT 25°C

AS157

AS158

AS159

PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
$-I_{CB0}$	$-V_{CB} = 20V$		1	100	nA
$-I_{EB0}$	$-V_{EB} = 5V$		.01	100	μA
$-V_{CE} (Sat)$	$-I_C = 10mA; -I_B = 0.5mA$			300	mV
$f_T$	$-I_C = 10mA; -V_{CE} = 5V$		150		MHz
$C_{b'c}$	$I_E = 0; -V_{CB} = 10V$		4.0		pF
	AS157				
$h_{FE}$	$-I_C = 2mA; -V_{CE} = 5V$	60		570	
$-V_{CEO}$	$-I_C = 1mA$	45			V
	AS158				
$h_{FE}$	$-I_C = 2mA; -V_{CE} = 5V$	60		570	
$-V_{CEO}$	$-I_C = 1mA$	25			V
	AS159				
$h_{FE}$	$-I_C = 2mA; -V_{CE} = 5V$	95		570	
$h_{FE}$	$-I_C = 10μA; -V_{CE} = 5V$	80			
$-V_{CEO}$	$-I_C = 1mA$	20			V
NF	$-I_C = 200μA; -V_{CE} = 5V$				
	$R_B = 2KΩ; \Delta f = 30Hz-15KHz$		1.2	4	dB

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